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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,393	03/18/2004	Seiji Toyoda	041309/275931	5512

826 7590 02/16/2006

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EXAMINER

LEE, SIN J

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/803,393

Applicant(s)

TOYODA ET AL.

Examiner

Sin J. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15,17,21,22 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15,17,21,22 and 27-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/409,078.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. In view of applicants' remarks and amendment filed on February 2, 2006, previous 112, first paragraph rejection on claims 22 and 27 and previous objection on claims 22 and 27 are hereby withdrawn.
2. Due to newly cited prior arts, finality of the last office action is hereby withdrawn, and the following rejections are made *non-final*. The Examiner sincerely apologizes for any inconvenience caused by this.

### *Claim Rejections - 35 USC § 102*

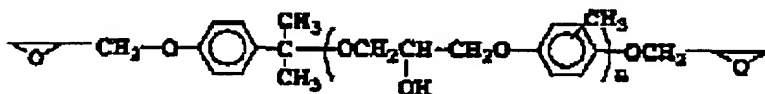
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15, 17, 21, 22 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomaru et al (JP 10-148729 and its machine-assisted English translation provided by JPO).

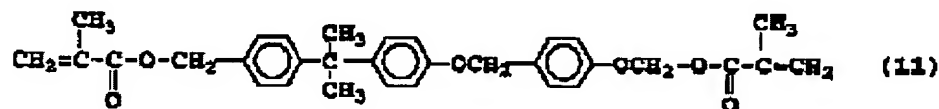
In Example 1 (see English translation), Tomaru teaches a solution containing a liquefied epoxy oligomer which structure is shown below and a photopolymerization initiator:



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Tomaru obtains an optical waveguide pattern by forming a film from the solution, exposing the film to UV light through a mask, and developing away the unexposed portion with isopropanol solution and thus forming a ridge pattern of a configuration.

Also, in Example 7, Tomaru teaches a solution containing the following acrylic oligomer and a photopolymerization initiator:

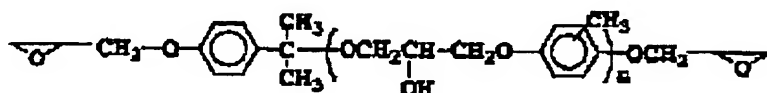


Tomaru obtains an optical waveguide by the same method as in his Example 1.

Therefore, Tomaru teaches present inventions of claims 15, 17, 21, 22 and 27-30 ; for present formula (5a) of claim 15, present  $X_3$  would be  $-\text{OCH}_2\text{O}-$ , which is an oxyalkylene group or an alkyleneoxy group bonded to another oxygen atom. However, present claim 15 recites that  $X_3$  is a connection group **including** an alkyleneoxy or oxyalkylene group. Thus, present connection group  $X_3$  does not exclude presence of the extra oxygen atom (because "including" is an open-ended language).

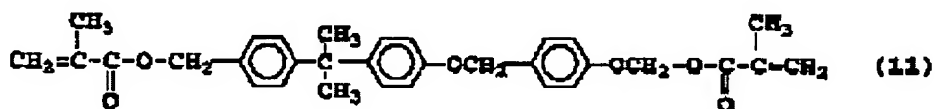
5. Claims 15, 17, 21, 22 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomaru et al (JP 10-253845 and its machine-assisted English translation provided by JPO).

In [0040]-[0046] (see English translation), Tomaru teaches a solution containing a liquefied epoxy oligomer which structure is shown below and a photopolymerization initiator:



Tomaru obtains an optical waveguide pattern by forming a film from the solution, exposing the film to UV light through a mask, and developing away the unexposed portion with isopropanol solution and thus forming a ridge pattern of a configuration.

Also, in [0072]-[0074], , Tomaru teaches a solution containing the following acrylic oligomer and a photopolymerization initiator:



Therefore, Tomaru teaches present inventions of claims 15, 17, 21, 22 and 27-30 ; for present formula (5a) of claim 15, present X<sub>3</sub> would be -OCH<sub>2</sub>O-, which is an oxyalkylene group or an alkyleneoxy group bonded to another oxygen atom. However, present claim 15 recites that X<sub>3</sub> is a connection group *including* an alkyleneoxy or oxyalkylene group. Thus, present connection group X<sub>3</sub> does not exclude presence of the extra oxygen atom (because "including" is an open-ended language).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

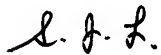
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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

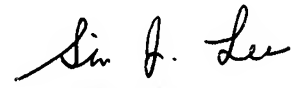
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee

February 14, 2006



**SIN LEE**  
**PRIMARY EXAMINER**